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Jeffrey C. Hood
Conley, Rose, & Tayon, P.C.
P.O. Box 398
Austin, TX 78767

EXAMINER

SHANG, ANNAN Q

ART UNIT PAPER NUMBER

2614

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,378

Applicant(s)

THORNTON ET AL.

Examiner

Annan Q Shang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-131 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-131 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/07/02,01/14/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 objected to because of the following informalities: In claim 1, lines 6, it appears it appears the phrase "a human interface remotely located remotely from said location," should be changed to "a human interface located remotely from said location,". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-11, 13-46, 48-73, 77-99 and 103-131, are rejected under 35 U.S.C. 102(e) as being anticipated by **Humpeman et al (6,603,488)**.

As to claim 1, note the **Humpleman et al** figure 1, disclose a method and system for commanding and controlling diverse home devices and further disclose a computer network, comprising:

the claimed "a plurality of interconnected nodes, each one of the plurality of nodes a corresponding data terminal equipment (DTE) device coupled thereto,..." are met by IEEE 1394 bus 114 Nodes of Network (1394 Nodes) 100 (fig. 1, 7, col. 4, lines

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48-59 and col. 14, lines 20-32), which are interconnecting nodes, each one of the plurality of nodes having a corresponding Digital Television (DTV) 102 (Dads TV; Basement TV; Jims TV, PCs, etc., figs. 7-10) and other devices (Digital Video Device (DVD) 108, Digital Video Cassette (DVCR) 110, DSS-NIU 104) "data terminal equipment (DTE) device" coupled thereto (col. 5, line 66-col. 6, line 13); note that Devices in the various Rooms with display capability (Dads TV; Basement TV; Jims TV, PCs, etc., col. 19, lines 11-31) acts as a client, human interface and session manager to remotely control functions of any devices (or servers) on Network (NW) 100 (col. 6, lines 58-64 and col. 15, lines 23-28), where a user arranges device images in groups according to respective home device placement, e.g., room by room transmitting/receiving audio/video (AV) and control/command (CC) signals to/from devices connected to NW 100 (col. 5, lines 54-59), where DTV 102 "at least one of the corresponding DTE devices," comprises:

the claimed "a computing system located at a first location" is met by Home Server 150 or DHCP Server 106 (H/DHCP 150/106) (col. 7, lines 1-11, col. 11, lines 26-41 and col. 14, line 20-33), which is a computing system located in a first location (Room-1);

the claimed "a human interface located remotely from the first location," is met by DTV 102 or a Personal Computer (PC) (col. 6, lines 15-27 and 58-64), which is located remotely in another location (Room-2) from Room-1 and provides "human interface" to Network (NW) 100, where DTV 102 or PC comprising a screen display unit "display device" and a mouse or other point-and-click device "an input/output ("I/O") device" (col.

5, lines 21-32, col. 7, lines 39-51 and col. 8, lines 47-53), note that the DTV 102 is coupled to Screen or Display Unit of DTV 102 and also to a mouse and DTV 102 remotely controls Devices (or servers) connected to NW 100;

the claimed "a first interface device operable coupled to the computing system;" is met by DTV 102 (col. 6, lines 15-22), note that DTV 102 is the first interface device coupled to H/DHCP 150/106 and includes a Screen or display "a human interface" for displaying HTML pages and also, a receiver/transmitter (col. 7, lines 1-5, lines 18-24 and lines 39-51) which receives and interprets the HTML files associated with DVD 108, DVCR 110, etc.;

the claimed "a second interface device operable to couple to the display device and the I/O device..." is met by DVD 108, Dad's DTV or DVCR 110 (col. 6, lines 7-13 and lines 58-64), which is a second interface device coupled to Screen or Display Unit and mouse of DTV 102; and

the claimed "at least one transmission line operable to couple the first and second interface devices;" is met by IEEE 1394 bus 114 (col. 5, line 54-col. 6, line 6 and lines 28-45), which is the transmission line coupled to DTV 102, DVD 108, DVCR 110, etc.;

where the DTV 102 device is operable to receive from H/DHCP 150/106 a video signal via satellite and Direct Broadcast Satellite Services (DBSS) 104 to be transmitted to DTV 102 Screen or Display Unit and control/command (CC) information "non-video signal" (col. 7, lines 3-7 and lines 39-51) to be transmitted to the mouse, and convert each of the video signal and CC information into a format suitable for transmission to

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the DVD 108, DVCR 110, etc.; note that the external network signals, such as video/audio signals received at DBSS 104 and IP signals received at Internet Proxy 1104, and other signals generated at the various home devices, are convert to IEEE 1394 format, protocol or standards, to enable signals to be communicated, over the 1394 cabling network, between devices connected to NW 100, furthermore the signals are convert back to original format and displayed on the various display devices (col. 4, lines 48-63 and col. 5, line 54-col. 6, line 10);

where the DTV 102 is operable to transmit the converted video signal and the converted CC information to DVD 108, DVCR 110, etc., via 1394 bus 114; and where DVD 108, DVCR 110, etc., is operable to receive the converted AV signal and converted CC information from DTV 102 to provide the video signal and CC information to the DTV 102's Screen or display unit and the mouse device, respectively; note that video and CC signals are transmitted over the 1394 NW bus 114 to all video devices connected to NW 100 (col. 19, lines 43-65, col. 20, lines 21-30 and lines 45-62)

As to claims 2 and 3, Humpleman further discloses where the H/DHCP 150/106 generates video signal and CC signal in a first format for transmission to DTV 102, or other display units, and where the DTV 102 is operable to receive the video signal and CC signal in the first format and convert each of the video signal and the CC signal into a second format suitable for transmission to other display units and transmits/receive signals over distances greater than 10 feet (col. 4, lines 48-63 and col. 5, line 54-col. 6, line 10); note that the various home devices includes convert signals AV and CC signals

into IEEE 1394 format for receiving/transmitting over the IEEE 1394 cabling and to other formats for displaying on the various display units.

Claims 4 and 5 are met as previously discussed with respect to claim 1.

As to claims 6 and 7, Humpleman further discloses where the DTV 102 is operable to encode the video signal and CC signals into IEEE 1394 format for transmission to Dad's DTV, DVCR, DVD, etc., where Dad's DTV, DVCR, DVD, etc is operable to decode the encoded video signal and the encoded CC signals to reproduce the AV signal and CC signals to DTV 102, PCs and other DTVs and mouse, respectively (col. 14, line 49-col. 15, line 2); note the various devices receives/transmits the IEEE 1394 signals and decodes/encodes into a format suitable for presentation on respective display device.

As to claim 8, Humpleman further discloses where IEEE 1394 cabling system comprises a first transmission line to transmit/receive video signals between devices and a second transmission line to transmit/receive CC signals and other data between devices (col. 5, lines 54-65).

As to claims 9-11, Humpleman further discloses where DTV 102 is operable to combine the video (AV) signal and the CC signal into AV/CC signal to 1394 format for transmission to other devices over the 1394 cabling system, where the AV/CC signals are transmitted via the 1394 to other devices which performs identical functions as DTV 102, i.e., encoding/decoding AV/CC signals to enable the devices to display video and interactive icons simultaneously (col. 5, lines 18-32, lines 54-65, col. 8, line 47-col. 9,

line 9 and col. 17, lines 2-22), note that the IEEE 1394 comprises various transmission lines for transmitting, data, video, audio, telephone signals, etc.,

As to claim 13, Humpleman further discloses where the 1394 cable interconnects the plurality of devices (col. 5, lines 54-65).

As to claim 14, Humpleman further discloses where the H/DHCP server comprises a computer chassis and a processor "one computing system component" housed in the computer chassis and coupled to DTV 102 (figs. 3 and col. 11, lines 26-41).

As to claim 15, Humpleman further discloses where the I/O device of the DTV 102 further comprises a mouse (col. 5, lines 28-32).

Claim 16 is met as previously discussed with respect to claim 3.

Claim 17 is met as previously discussed with respect to claims 6 and 7.

Claim 18 is met as previously discussed with respect to claims 6 and 7.

Claim 19 is met as previously discussed with respect to claim 3.

Claim 20 is met as previously discussed with respect to claims 6 and 7.

As to claim 21, Humpleman further discloses positions in a room DTV 102, PCs, DVD, DVCR, etc., "at least two DTE" in different rooms as desired and each user remotely controlling other devices in other rooms, where the display devices can act as client or server and DVD, DVCR, DHCP/DBSS, etc., "two commonly computing systems" acting as servers (col. 14, line 20-col. 15, line 2, lines 23-28) with corresponding Dads TV or Jims TV or other PCs on the NW 100 as "human interfaces" (col. 19, lines 9-22) each located remotely from DVD, DVCR, DHCP/DBSS, etc.

As to claims 22 and 23, Humpleman further discloses where DVD, DVCR, DHCP/DBSS, etc., respectively coupled to each one of the nodes and housed together in a shared room.

As to claim 24, Humpleman inherently discloses where the common support structure is a computer rack.

Claim 25 is met as previously discussed with respect to claim 21.

As to claim 26, note the **Humpleman et al** figure 1, disclose a method and system for commanding and controlling diverse home devices and further disclose a computer network, comprising:

the claimed "a plurality of interconnected nodes, each one of the plurality of nodes a corresponding data terminal equipment (DTE) device coupled thereto,..." are met by IEEE 1394 bus 114 Nodes of Network (1394 Nodes) 100 (fig. 1, 7, col. 4, lines 48-59 and col. 14, lines 20-32), which are interconnecting nodes, each one of the plurality of nodes having a corresponding Digital Television (DTV) 102 (Dads TV; Basement TV; Jims TV, PCs, etc., figs. 7-10) and other devices (Digital Video Device (DVD) 108, Digital Video Cassette (DVCR) 110, DSS-NIU 104) "data terminal equipment (DTE) device" coupled thereto (col. 5, line 66-col. 6, line 13); note that Devices in the various Rooms with display capability (Dads TV; Basement TV; Jims TV, PCs, etc., col. 19, lines 11-31) acts as a client, human interface and session manager to remotely control functions of any devices (or servers) on Network (NW) 100 (col. 6, lines 58-64 and col. 15, lines 23-28), where a user arranges device images in groups according to respective home device placement, e.g., room by room

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transmitting/receiving audio/video (AV) and control/command (CC) signals to/from devices connected to NW 100 (col. 5, lines 54-59), where DTV 102 "at least one of the corresponding DTE devices," comprises:

the claimed "a computing system located at a first location" is met by Home Server 150 or DHCP Server 106 (H/DHCP 150/106) (col. 7, lines 1-11, col. 11, lines 26-41 and col. 14, line 20-33), which is a computing system located in a first location (Room-1);

the claimed "a human interface located remotely from the first location," is met by DTV 102 or a Personal Computer (PC) (col. 6, lines 15-27 and 58-64), which is located remotely in another location (Room-2) from Room-1 and provides human interface to Network (NW) 100, where DTV 102 or PC comprising a screen display unit "display device" and a mouse or other point-and-click device "an input/output ("I/O") device" (col. 5, lines 21-32, col. 7, lines 39-51 and col. 8, lines 47-53), note that the DTV 102 is coupled to Screen or Display Unit of DTV 102 and also to a mouse;

the claimed "a first interface device operable coupled to the computing system," is met by DTV 102 (col. 6, lines 15-22), note that DTV 102 is the first interface device coupled to H/DHCP 150/106 and includes a Screen or display "a human interface" for displaying HTML pages and also, a receiver/transmitter (col. 7, lines 1-5, lines 18-24 and lines 39-51) which receives and interprets the HTML files associated with DVD 108, DVCR 110, etc.;

the claimed "a second interface device operable to couple to the display device and the I/O device..." is met by DVD 108 or DVCR 110 (col. 6, lines 7-13 and lines

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58-64), which is a second interface device coupled to Screen or Display Unit and mouse of DTV 102; and

the claimed "at least one transmission line operable to couple the first and second interface devices;" is met by IEEE 1394 bus 114 (col. 5, line 54-col. 6, line 6 and lines 28-45), which is the transmission line coupled to DTV 102, DVD 108, DVCR 110, etc.;

where the DTV 102 device is operable to receive Graphic User Interface (GUI) of icons in HTML page and control/command information "human interface signals" generated by H/DHCP 150/106 and convert the GUI of icons, control/command information into a format suitable for transmission to the DVD 108, DVCR 110, etc.; and where the DVD 108, DVCR 110, etc., is operable to receive the control/command information from DTV 102 and convert the GUI of icons or HTML page into a format suitable for transmission to the DTV 102 Screen or Display Unit; note that the external network signals, such as video/audio signals received at DBSS 104 and IP signals received at Internet Proxy 1104, and other signals generated at the various home devices, are convert to IEEE 1394 format, protocol or standards, to enable signals to be communicated, over the 1394 cabling network, between devices connected to NW 100 (col. 4, lines 48-63 and col. 5, line 54-col. 6, line 10); furthermore video/audio and control/command signals are transmitted over the 1394 NW bus 114 to all video/audio devices connected to NW 100 (col. 19, lines 43-65, col. 20, lines 21-30 and lines 45-62)

Claim 27 is met as previously discussed with respect to claim 2.

Claim 28 is met as previously discussed with respect to claim 2.

Claim 29 is met as previously discussed with respect to claim 2.

Claim 30 is met as previously discussed with respect to claim 2.

Claim 31 is met as previously discussed with respect to claims 6 and 7.

As to claim 32, Humpleman further discloses where the DTV 102 or PCs comprises an interactive GUI, mouse or other point-and-click device "a plurality of human interface devices" and where CC signals comprises a plurality of CC signals, i.e., interactive GUI, mouse or other point-and-click, "plurality of human interface signals" corresponding to an interactive GUI, mouse or other point-and-click device (col. 5, lines 18-40).

As to claims 33-37, Humpleman further discloses where the DTV 102 receives the plurality of CC signals generated by H/DHCP Server and converts the plurality of CC signals into IEEE 1394 format for transmission to other devices, such as Dads TV, DVCR, etc., and where the Dads TV, DVCR, etc., receives the plurality of CC signals from the DTV 102 and convert the plurality of CC signals into a IEEE 1394 format for transmission to DTV 102 or Dads or Jims TV (col. 4, lines 48-63 and col. 5, line 54-col. 6, line 10); note that the various home devices includes convert signals AV and CC signals into IEEE 1394 format for receiving/transmitting over the IEEE 1394 cabling and to other formats for displaying on the various display units.

Claims 38-39 are met as previously discussed with respect to claims 8 and 9.

Claim 40 is met as previously discussed with respect to claim 33.

Claim 41 is met as previously discussed with respect to claims 8 and 9.

Claim 42 is met as previously discussed with respect to claim 32.

Claim 43 is met as previously discussed with respect to claim 32.

Claim 44 is met as previously discussed with respect to claim 32.

Claim 45 is met as previously discussed with respect to claims 8 and 9.

Claim 46 is met as previously discussed with respect to claims 17 and 18.

Claim 48 is met as previously discussed with respect to claim 3.

Claim 49 is met as previously discussed with respect to claim 17.

Claim 50 is met as previously discussed with respect to claim 33.

Claim 51 is met as previously discussed with respect to claim 3.

Claim 52 is met as previously discussed with respect to claim 4.

Claims 53-54 are met as previously discussed with respect to claims 21 and 22.

As to claim 55, note the **Humpleman et al** figure 1, disclose a method and system for commanding and controlling diverse home devices and further disclose a computer network, comprising:

the claimed "a plurality of interconnected nodes, each one of the plurality of nodes a corresponding data terminal equipment (DTE) device coupled thereto,..." are met by IEEE 1394 bus 114 Nodes of Network (1394 Nodes) 100 (fig. 1, 7, col. 4, lines 48-59 and col. 14, lines 20-32), which are interconnecting nodes, each one of the plurality of nodes having a corresponding Digital Television (DTV) 102 (Dads TV; Basement TV; Jims TV, PCs, etc., figs. 7-10) and other devices (Digital Video Device (DVD) 108, Digital Video Cassette (DVCR) 110, DSS-NIU 104) "data terminal equipment (DTE) device" coupled thereto (col. 5, line 66-col. 6, line 13); note that Devices in the various Rooms with display capability (Dads TV; Basement TV; Jims TV,

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PCs, etc., col. 19, lines 11-31) acts as a client, human interface and session manager to remotely control functions of any devices (or servers) on Network (NW) 100 (col. 6, lines 58-64 and col. 15, lines 23-28), where a user arranges device images in groups according to respective home device placement, e.g., room by room transmitting/receiving audio/video (AV) and control/command (CC) signals to/from devices connected to NW 100 (col. 5, lines 54-59), where DTV 102 "at least one of the corresponding DTE devices," comprises:

the claimed "a computing system located at a first location" is met by Home Server 150 or DHCP Server 106 (H/DHCP 150/106) (col. 7, lines 1-11, col. 11, lines 26-41 and col. 14, line 20-33), which is a computing system located in a first location (Room-1);

the claimed "a human interface located remotely from the first location," is met by DTV 102 or a Personal Computer (PC) (col. 6, lines 15-27 and 58-64), which is located remotely in another location (Room-2) from Room-1 and provides "human interface" to Network (NW) 100, where DTV 102 or PC comprising a screen display unit "display device" and a mouse or other point-and-click device "an input/output ("I/O") device" (col. 5, lines 21-32, col. 7, lines 39-51 and col. 8, lines 47-53), note that the DTV 102 is coupled to Screen or Display Unit of DTV 102 and also to a mouse and DTV 102 remotely controls Devices (or servers) connected to NW 100;

the claimed "a first interface device operable coupled to the computing system;" is met by DTV 102 (col. 6, lines 15-22), note that DTV 102 is the first interface device coupled to H/DHCP 150/106 and includes a Screen or display "a human interface" for

displaying HTML pages and also, a receiver/transmitter (col. 7, lines 1-5, lines 18-24 and lines 39-51) which receives and interprets the HTML files associated with DVD 108, DVCR 110, etc.;

the claimed "a second interface device operable to couple to the display device and the I/O device..." is met by DVD 108 or DVCR 110 (col. 6, lines 7-13 and lines 58-64), which is a second interface device coupled to Screen or Display Unit and mouse of DTV 102; and

the claimed "at least one transmission line operable to couple the first and second interface devices;" is met by IEEE 1394 bus 114 (col. 5, line 54-col. 6, line 6 and lines 28-45), which is the transmission line coupled to DTV 102, DVD 108, DVCR 110, etc.; where the DTV 102 device is operable to convert video signals, via satellite and Direct Broadcast Satellite Services (DBSS) 104, generated by H/DHCP 150/106 into a format suitable for transmission to DVD 108, DVCR 110, etc., via 1394 bus 114 (col. 7, lines 3-7 and lines 39-51); where DVD 108, DVCR 110, etc., is operable to convert signals received from DTV 102 into a format suitable for transmission via 1394 NW bus 114 to other DTVs 102, PCs with display capability (col. 7, lines 3-7 and lines 39-51); note that the external network signals, such as video/audio signals received at DBSS 104 and IP signals received at Internet Proxy 1104, and other signals generated at the various home devices, are convert to IEEE 1394 format, protocol or standards, to enable signals to be communicated, over the 1394 cabling network, between devices connected to NW 100 (col. 4, lines 48-63 and col. 5, line 54-col. 6, line 10); furthermore video/audio and control/command signals are transmitted over the 1394 NW bus 114 to

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all video/audio devices connected to NW 100 (col. 19, lines 43-65, col. 20, lines 21-30 and lines 45-62).

As to claim 56, note the **Humpleman et al** figure 1, disclose a method and system for commanding and controlling diverse home devices and further disclose a computer network, comprising:

the claimed "a plurality of interconnected nodes, each one of the plurality of nodes a corresponding data terminal equipment (DTE) device coupled thereto,..." are met by IEEE 1394 bus 114 Nodes of Network (1394 Nodes) 100 (fig. 1, 7, col. 4, lines 48-59 and col. 14, lines 20-32), which are interconnecting nodes, each one of the plurality of nodes having a corresponding Digital Television (DTV) 102 (Dads TV; Basement TV; Jims TV, PCs, etc., figs. 7-10) and other devices (Digital Video Device (DVD) 108, Digital Video Cassette (DVCR) 110, DSS-NIU 104) "data terminal equipment (DTE) device" coupled thereto (col. 5, line 66-col. 6, line 13); note that Devices in the various Rooms with display capability (Dads TV; Basement TV; Jims TV, PCs, etc., col. 19, lines 11-31) acts as a client, human interface and session manager to remotely control functions of any devices (or servers) on Network (NW) 100 (col. 6, lines 58-64 and col. 15, lines 23-28), where a user arranges device images in groups according to respective home device placement, e.g., room by room transmitting/receiving audio/video (AV) and control/command (CC) signals to/from devices connected to NW 100 (col. 5, lines 54-59), where DTV 102 "at least one of the corresponding DTE devices," comprises:

the claimed "a computing system located at a first location" is met by Home Server 150 or DHCP Server 106 (H/DHCP 150/106) (col. 7, lines 1-11, col. 11, lines 26-41 and col. 14, line 20-33), which is a computing system located in a first location (Room-1);

the claimed "a human interface located remotely from the first location," is met by DTV 102 or a Personal Computer (PC) (col. 6, lines 15-27 and 58-64), which is located remotely in another location (Room-2) from Room-1 and provides "human interface" to Network (NW) 100, where DTV 102 or PC comprising a screen display unit "display device" and a mouse or other point-and-click device "an input/output ("I/O") device" (col. 5, lines 21-32, col. 7, lines 39-51 and col. 8, lines 47-53), note that the DTV 102 is coupled to Screen or Display Unit of DTV 102 and also to a mouse and DTV 102 remotely controls Devices (or servers) connected to NW 100;

the claimed "a first interface device operable coupled to the computing system;" is met by DTV 102 (col. 6, lines 15-22), note that DTV 102 is the first interface device coupled to H/DHCP 150/106 and includes a Screen or display "a human interface" for displaying HTML pages and also, a receiver/transmitter (col. 7, lines 1-5, lines 18-24 and lines 39-51) which receives and interprets the HTML files associated with DVD 108, DVCR 110, etc.;

the claimed "a second interface device operable to couple to the display device and the I/O device..." is met by DVD 108 or DVCR 110 (col. 6, lines 7-13 and lines 58-64), which is a second interface device coupled to Screen or Display Unit and mouse of DTV 102; and

the claimed "at least one transmission line operable to couple the first and second interface devices;" is met by IEEE 1394 bus 114 (col. 5, line 54-col. 6, line 6 and lines 28-45), which is the transmission line coupled to DTV 102, DVD 108, DVCR 110, etc.; where the DTV 102 device is operable to convert video signals, via satellite and Direct Broadcast Satellite Services (DBSS) 104, generated by H/DHCP 150/106 into a format suitable for transmission to DVD 108, DVCR 110, etc., via 1394 bus 114 (col. 7, lines 3-7 and lines 39-51); where DVD 108, DVCR 110, etc., is operable to convert signals received from DTV 102 into a format suitable for transmission via 1394 NW bus 114 to other DTVs 102, PCs with display capability (col. 7, lines 3-7 and lines 39-51); note that the external network signals, such as video/audio signals received at DBSS 104 and IP signals received at Internet Proxy 1104, and other signals generated at the various home devices, are convert to IEEE 1394 format, protocol or standards, to enable signals to be communicated, over the 1394 cabling network, between devices connected to NW 100 (col. 4, lines 48-63 and col. 5, line 54-col. 6, line 10); furthermore video/audio and control/command signals are transmitted over the 1394 NW bus 114 to all video/audio devices connected to NW 100 (col. 19, lines 43-65, col. 20, lines 21-30 and lines 45-62).

Claim 57 is met as previously discussed with respect to claim 2.

Claim 58 is met as previously discussed with respect to claim 3.

Claim 59 is met as previously discussed with respect to claim 4.

Claims 60-61 are met as previously discussed with respect to claims 5-6.

Claim 62 is met as previously discussed with respect to claim 3.

Claim 63 is met as previously discussed with respect to claim 4.

Claims 64-65 are met as previously discussed with respect to claims 8-9.

As to claim 66, note the **Humpleman et al** figure 1, disclose a method and system for commanding and controlling diverse home devices and further disclose a computer network, comprising:

the claimed "a plurality of interconnected nodes, each one of the plurality of nodes a corresponding data terminal equipment (DTE) device coupled thereto,..." are met by IEEE 1394 bus 114 Nodes of Network (1394 Nodes) 100 (fig. 1, 7, col. 4, lines 48-59 and col. 14, lines 20-32), which are interconnecting nodes, each one of the plurality of nodes having a corresponding Digital Television (DTV) 102 (Dads TV; Basement TV; Jims TV, PCs, etc., figs. 7-10) and other devices (Digital Video Device (DVD) 108, Digital Video Cassette (DVCR) 110, DSS-NIU 104) "data terminal equipment (DTE) device" coupled thereto (col. 5, line 66-col. 6, line 13); note that Devices in the various Rooms with display capability (Dads TV; Basement TV; Jims TV, PCs, etc., col. 19, lines 11-31) acts as a client, human interface and session manager to remotely control functions of any devices (or servers) on Network (NW) 100 (col. 6, lines 58-64 and col. 15, lines 23-28), where a user arranges device images in groups according to respective home device placement, e.g., room by room transmitting/receiving audio/video (AV) and control/command (CC) signals to/from devices connected to NW 100 (col. 5, lines 54-59), where DTV 102 "at least one of the corresponding DTE devices," comprises:

the claimed "a computing system located at a first location" is met by Home Server 150 or DHCP Server 106 (H/DHCP 150/106) (col. 7, lines 1-11, col. 11, lines 26-41 and col. 14, line 20-33), which is a computing system located in a first location (Room-1);

the claimed "a human interface located remotely from the first location," is met by DTV 102 or a Personal Computer (PC) (col. 6, lines 15-27 and 58-64), which is located remotely in another location (Room-2) from Room-1 and provides human interface to Network (NW) 100, where DTV 102 or PC comprising a screen display unit "display device" and a mouse or other point-and-click device "an input/output ("I/O") device" (col. 5, lines 21-32, col. 7, lines 39-51 and col. 8, lines 47-53), note that the DTV 102 is coupled to Screen or Display Unit of DTV 102 and also to a mouse;

the claimed "a first interface device operable coupled to the computing system;" is met by DTV 102 (col. 6, lines 15-22), note that DTV 102 is the first interface device coupled to H/DHCP 150/106 and includes a Screen or display "a human interface" for displaying HTML pages and also, a receiver/transmitter (col. 7, lines 1-5, lines 18-24 and lines 39-51) which receives and interprets the HTML files associated with DVD 108, DVCR 110, etc.;

the claimed "a second interface device operable to couple to the display device and the I/O device..." is met by DVD 108 or DVCR 110 (col. 6, lines 7-13 and lines 58-64), which is a second interface device coupled to Screen or Display Unit and mouse of DTV 102; and

the claimed “at least one transmission line operable to couple the first and second interface devices,” is met by IEEE 1394 bus 114 (col. 5, line 54-col. 6, line 6 and lines 28-45), which is the transmission line coupled to DTV 102, DVD 108, DVCR 110, etc.;

where the DVD 108 or DVCR 110 DTV 102 device is operable to receive Graphic User Interface (GUI) of icons in HTML page and control and command information “human interface signals” generated by H/DHCP 150/106 and convert the GUI of icons, control and command information into a format suitable for transmission to the DTV 102; and where the DTV 102 is operable to receive the control and command information from DVD 108, DVCR 110, etc., and convert the control signals and commands generated from GUI of icons or HTML page into a format suitable for transmission to the H/DHCP 150/106; note that the external network signals, such as video/audio signals received at DBSS 104 and IP signals received at Internet Proxy 1104, and other signals generated at the various home devices, are convert to IEEE 1394 format, protocol or standards, to enable signals to be communicated, over the 1394 cabling network, between devices connected to NW 100 (col. 4, lines 48-63 and col. 5, line 54-col. 6, line 10); furthermore video/audio and control/command signals are transmitted over the 1394 NW bus 114 to all video/audio devices connected to NW 100 (col. 19, lines 43-65, col. 20, lines 21-30 and lines 45-62).

Claim 67 is met as previously discussed with respect to claim 2.

Claim 68 is met as previously discussed with respect to claims 5-6.

Claim 69 is met as previously discussed with respect to claim 3.

Claim 70 is met as previously discussed with respect to claim 4.

Claim 71 is met as previously discussed with respect to claims 5-6.

As to claims 72-73, note the **Humpleman et al** figure 1, disclose a method and system for commanding and controlling diverse home devices and further disclose a computer network, comprising:

the claimed "a plurality of interconnected nodes, each one of the plurality of nodes a corresponding data terminal equipment (DTE) device coupled thereto,..." are met by IEEE 1394 bus 114 Nodes of Network (1394 Nodes) 100 (fig. 1, 7, col. 4, lines 48-59 and col. 14, lines 20-32), which are interconnecting nodes, each one of the plurality of nodes having a corresponding Digital Television (DTV) 102 (Dads TV; Basement TV; Jims TV, PCs, etc., figs. 7-10) and other devices (Digital Video Device (DVD) 108, Digital Video Cassette (DVCR) 110, DSS-NIU 104) "data terminal equipment (DTE) device" coupled thereto (col. 5, line 66-col. 6, line 13); note that Devices in the various Rooms with display capability (Dads TV; Basement TV; Jims TV, PCs, etc., col. 19, lines 11-31) acts as a client, human interface and session manager to remotely control functions of any devices (or servers) on Network (NW) 100 (col. 6, lines 58-64 and col. 15, lines 23-28), where a user arranges device images in groups according to respective home device placement, e.g., room by room transmitting/receiving audio/video (AV) and control/command (CC) signals to/from devices connected to NW 100 (col. 5, lines 54-59), where DTV 102 "at least one of the corresponding DTE devices," comprises:

the claimed "a computing system located at a first location" is met by Home Server 150 or DHCP Server 106 (H/DHCP 150/106) (col. 7, lines 1-11, col. 11, lines 26-41 and col. 14, line 20-33), which is a computing system located in a first location (Room-1);

the claimed "a human interface located remotely from the first location," is met by DTV 102 or a Personal Computer (PC) (col. 6, lines 15-27 and 58-64), which is located remotely in another location (Room-2) from Room-1 and provides "human interface" to Network (NW) 100, where DTV 102 or PC comprising a screen display unit "display device" and a mouse or other point-and-click device "an input/output ("I/O") device" (col. 5, lines 21-32, col. 7, lines 39-51 and col. 8, lines 47-53), note that the DTV 102 is coupled to Screen or Display Unit of DTV 102 and also to a mouse and DTV 102 remotely controls Devices (or servers) connected to NW 100;

the claimed "a first interface device operable coupled to the computing system;" is met by DTV 102 (col. 6, lines 15-22), note that DTV 102 is the first interface device coupled to H/DHCP 150/106 and includes a Screen or display "a human interface" for displaying HTML pages and also, a receiver/transmitter (col. 7, lines 1-5, lines 18-24 and lines 39-51) which receives and interprets the HTML files associated with DVD 108, DVCR 110, etc.;

the claimed "a second interface device operable to couple to the display device and the I/O device..." is met by DVD 108 or DVCR 110 (col. 6, lines 7-13 and lines 58-64), which is a second interface device coupled to Screen or Display Unit and mouse of DTV 102; and

the claimed "at least one transmission line operable to couple the first and second interface devices;" is met by IEEE 1394 bus 114 (col. 5, line 54-col. 6, line 6 and lines 28-45), which is the transmission line coupled to DTV 102, DVD 108, DVCR 110, etc.;

where the DTV 102 device is operable to receive from H/DHCP 150/106 a video signal via satellite and Direct Broadcast Satellite Services (DBSS) 104 to be transmitted to DTV 102 Screen or Display Unit and control and command information "non-video signal" (col. 7, lines 3-7 and lines 39-51) to be transmitted to the mouse, and convert each of the video signal and control and command information into a format suitable for transmission to the DVD 108, DVCR 110, etc.;

where the DTV 102 is operable to transmit the converted video signal and the converted control and command information to DVD 108, DVCR 110, etc., via 1394 bus 114; and where DVD 108, DVCR 110, etc., is operable to receive the converted video signal and converted control and command information from DTV 102 to provide the video signal and control and command information to the DTV 102's Screen or display unit and the mouse device, respectively; note that the external network signals, such as video/audio signals received at DBSS 104 and IP signals received at Internet Proxy 1104, and other signals generated at the various home devices, are convert to IEEE 1394 format, protocol or standards, to enable signals to be communicated, over the 1394 cabling network, between devices connected to NW 100 (col. 4, lines 48-63 and col. 5, line 54-col. 6, line 10); furthermore video/audio and control/command signals are

transmitted over the 1394 NW bus 114 to all video/audio devices connected to NW 100 (col. 19, lines 43-65, col. 20, lines 21-30 and lines 45-62).

As to claim 77, Humpleman further discloses where the CC signals comprise non-video signals (col. 5, lines 18-32 and lines 54-65).

Claim 78 is met as previously discussed with respect to claim 2.

Claim 79 is met as previously discussed with respect to claim 3.

Claim 80 is met as previously discussed with respect to claim 4.

Claim 81 is met as previously discussed with respect to claim 3.

Claim 82 is met as previously discussed with respect to claim 2.

Claims 83-84 are met as previously discussed with respect to claims 8-9.

Claim 85 is met as previously discussed with respect to claim 10.

Claims 86-87 are met as previously discussed with respect to claims 9-10.

Claim 89 is met as previously discussed with respect to claim 13.

Claim 90 is met as previously discussed with respect to claims 15.

Claim 91 is met as previously discussed with respect to claim 3.

Claims 92-93 are met as previously discussed with respect to claims 17-18.

Claim 94 is met as previously discussed with respect to claim 3.

Claim 95 is met as previously discussed with respect to claims 6-7.

Claims 96-97 are met as previously discussed with respect to claims 21-22.

As to claims 98-99, note the **Humpleman et al** figure 1, disclose a method and system for commanding and controlling diverse home devices and further disclose a computer network, comprising:

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the claimed "a plurality of interconnected nodes, each one of the plurality of nodes a corresponding data terminal equipment (DTE) device coupled thereto,..." are met by IEEE 1394 bus 114 Nodes of Network (1394 Nodes) 100 (fig. 1, 7, col. 4, lines 48-59 and col. 14, lines 20-32), which are interconnecting nodes, each one of the plurality of nodes having a corresponding Digital Television (DTV) 102 (Dads TV; Basement TV; Jims TV, PCs, etc., figs. 7-10) and other devices (Digital Video Device (DVD) 108, Digital Video Cassette (DVCR) 110, DSS-NIU 104) "data terminal equipment (DTE) device" coupled thereto (col. 5, line 66-col. 6, line 13); note that Devices in the various Rooms with display capability (Dads TV; Basement TV; Jims TV, PCs, etc., col. 19, lines 11-31) acts as a client, human interface and session manager to remotely control functions of any devices (or servers) on Network (NW) 100 (col. 6, lines 58-64 and col. 15, lines 23-28), where a user arranges device images in groups according to respective home device placement, e.g., room by room transmitting/receiving audio/video (AV) and control/command (CC) signals to/from devices connected to NW 100 (col. 5, lines 54-59), where DTV 102 "at least one of the corresponding DTE devices," comprises:

the claimed "a computing system located at a first location" is met by Home Server 150 or DHCP Server 106 (H/DHCP 150/106) (col. 7, lines 1-11, col. 11, lines 26-41 and col. 14, line 20-33), which is a computing system located in a first location (Room-1);

the claimed "a human interface located remotely from the first location," is met by DTV 102 or a Personal Computer (PC) (col. 6, lines 15-27 and 58-64), which is located

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remotely in another location (Room-2) from Room-1 and provides "human interface" to Network (NW) 100, where DTV 102 or PC comprising a screen display unit "display device" and a mouse or other point-and-click device "an input/output ("I/O") device" (col. 5, lines 21-32, col. 7, lines 39-51 and col. 8, lines 47-53), note that the DTV 102 is coupled to Screen or Display Unit of DTV 102 and also to a mouse and DTV 102 remotely controls Devices (or servers) connected to NW 100;

the claimed "a first interface device operable coupled to the computing system;" is met by DTV 102 (col. 6, lines 15-22), note that DTV 102 is the first interface device coupled to H/DHCP 150/106 and includes a Screen or display "a human interface" for displaying HTML pages and also, a receiver/transmitter (col. 7, lines 1-5, lines 18-24 and lines 39-51) which receives and interprets the HTML files associated with DVD 108, DVCR 110, etc.;

the claimed "a second interface device operable to couple to the display device and the I/O device..." is met by DVD 108 or DVCR 110 (col. 6, lines 7-13 and lines 58-64), which is a second interface device coupled to Screen or Display Unit and mouse of DTV 102; and

the claimed "at least one transmission line operable to couple the first and second interface devices;" is met by IEEE 1394 bus 114 (col. 5, line 54-col. 6, line 6 and lines 28-45), which is the transmission line coupled to DTV 102, DVD 108, DVCR 110, etc.;

where the DTV 102 device is operable to receive from H/DHCP 150/106 a video signals "video information," via satellite and Direct Broadcast Satellite Services (DBSS)

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104, and control and command signals "non-video information," "human interface signals" generated by H/DHCP 150/106 and convert video signals and the control and command signals into a format suitable for transmission to DVD 108, DVCR 110, etc.; or other DTVs 102 via 1394 bus 114 (col. 7, lines 3-7 and lines 39-51); and

where the other DTVs 102, PCs or DVD 108, DVCR 110, etc., is operable to receive the video, control and command signals from DTV 102 and convert the video, control and command signals into a format suitable for transmission to other DTVs 102 or PCs with display capability (col. 19, lines 43-65, col. 20, lines 21-30 and lines 45-62); note that the external network signals, such as video/audio signals received at DBSS 104 and IP signals received at Internet Proxy 1104, and other signals generated at the various home devices, are convert to IEEE 1394 format, protocol or standards, to enable signals to be communicated, over the 1394 cabling network, between devices connected to NW 100 (col. 4, lines 48-63 and col. 5, line 54-col. 6, line 10); furthermore video/audio and control/command signals are transmitted over the 1394 NW bus 114 to all video/audio devices connected to NW 100 (col. 19, lines 43-65, col. 20, lines 21-30 and lines 45-62).

Claim 103 is met as previously discussed with respect to claim 3.

Claim 104 is met as previously discussed with respect to claim 2.

Claim 105 is met as previously discussed with respect to claims 3.

Claim 106 is met as previously discussed with respect to claim 4.

Claim 107 is met as previously discussed with respect to claims 6-7.

Claim 108 is met as previously discussed with respect to claim 32.

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Claim 109 is met as previously discussed with respect to claims 33.

Claim 110 is met as previously discussed with respect to claim 33.

Claim 111 is met as previously discussed with respect to claim 3.

Claim 112 is met as previously discussed with respect to claim 4.

Claim 113 is met as previously discussed with respect to claim 2.

Claim 114 is met as previously discussed with respect to claims 8-9.

Claim 115 is met as previously discussed with respect to claim 33.

Claim 116 is met as previously discussed with respect to claims 32-33.

Claim 117 is met as previously discussed with respect to claims 32-33.

Claim 118 is met as previously discussed with respect to claim 32.

Claim 119 is met as previously discussed with respect to claim 32.

Claim 120 is met as previously discussed with respect to claims 32.

Claim 121 is met as previously discussed with respect to claim 9.

Claim 122 is met as previously discussed with respect to claim 32.

Claim 124 is met as previously discussed with respect to claim 4.

Claim 125 is met as previously discussed with respect to claim 17.

Claim 126 is met as previously discussed with respect to claim 2.

Claim 127 is met as previously discussed with respect to claim 3.

Claim 128 is met as previously discussed with respect to claim 4.

Claims 129-130 are met as previously discussed with respect to claims 21-22.

Claim 114 is met as previously discussed with respect to claim 3.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12 and 47, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Humpleman et al (6,603,488)** as applied to claims 1 and 46 respectively above, and in view of **Gorman (6,141,356)**

As to claim 12 and 47, Humpleman fails to explicitly teach where the transmission line coupling devices is a 4-wire cable.

However, note the **Gorman** reference figure 3, discloses a home wireline and wireless network, where the wireline network uses 2-wire and 4-wire telephone cabling system distribution of both high-speed data service (digital computer, video and multimedia data) and lower speed data service (POTS voice telephone signals) throughout a customer premises (col. 2, lines 35-57, col. 8, lines 13-34 and lines 57-67).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Gorman into the system of Humpleman to provide 2-wire and 4-wire telephone cabling transmission line and provide services for users with telephone lines without the cost of installing new wiring for the network.

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6. Claims 74-76 and 100-102, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Humpleman et al (6,603,488)** as applied to claims 73 and 99 respectively above, and in view of Papanicolaou et al (Re. 36,707).

As to claims 74-76 and 100-102, Humpleman fails to explicitly teach where the signal comprises an analog video signal, comprising Red signal, Blue signal and Green signal and further comprises horizontal sync signal and vertical sync signal.

However, note the Papanicolaou reference figures 1 and 10, discloses video telephony dialing system distribution analog video signals in NTSC format in home and where the analog video signals comprises Red signal, Blue signal and Green signal and further comprises horizontal sync signal and vertical sync signal (col. 3, lines 40-67, col. 13, lines 45-62 and col. 14, line 45-col.15, line 23).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching Papanicolaou into the system of Humpleman to provide analog video for users with analog television receivers, and provide services to all users, regardless of the user's terminal receiving device.

Conclusion

7, The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Humpleman (6,493,874) disclose set-top electronics and network interface unit arrangement.

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Rubinstain et al (6,088,368) disclose Ethernet transport facility over digital subscriber lines.

Frank et al (6,026,150) disclose network protocol-based home entertainment network.

Whittaker et al (6,130,893) disclose method and apparatus for multiplexing telephone lines over a common access network.

Bernstein (5,907,548) disclose telephone network local access using data messaging.

Hanai (5,541,670) disclose electric apparatus and connector.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q Shang** whose telephone number is **703-305-2156**. The examiner can normally be reached on **700am-500pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W Miller** can be reached on **703-305-4795**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at 866-217-9197 (toll-free).



Annan Q. Shang.



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600